

इंटरनेट

मानक

Disclosure to Promote the Right To Information

Whereas the Parliament of India has set out to provide a practical regime of right to information for citizens to secure access to information under the control of public authorities, in order to promote transparency and accountability in the working of every public authority, and whereas the attached publication of the Bureau of Indian Standards is of particular interest to the public, particularly disadvantaged communities and those engaged in the pursuit of education and knowledge, the attached public safety standard is made available to promote the timely dissemination of this information in an accurate manner to the public.

“जानने का अधिकार, जीने का अधिकार”

Mazdoor Kisan Shakti Sangathan

“The Right to Information, The Right to Live”

“पुराने को छोड़ नये के तरफ”

Jawaharlal Nehru

“Step Out From the Old to the New”

IS 363 (1993): Hasps and Staples -Specification [CED 15: Builder Hardware]



“ज्ञान से एक नये भारत का निर्माण”

Satyanarayan Gangaram Pitroda

“Invent a New India Using Knowledge”



“ज्ञान एक ऐसा खजाना है जो कभी चुराया नहीं जा सकता है”

Bhartrhari—Nitiśatakam

“Knowledge is such a treasure which cannot be stolen”

BLANK PAGE



भारतीय मानक

छपकों और कुंडों की विशिष्टि

(चौथा पुनरीक्षण)

Indian Standard

HASPS AND STAPLES — SPECIFICATION

(*Fourth Revision*)

UDC 683.356

© BIS 1993

BUREAU OF INDIAN STANDARDS
MANAK BHAVAN, 9 BAHADUR SHAH ZAFAR MARG
NEW DELHI 110002

May 1993

Price Group 3

FOREWORD

This Indian Standard was adopted by the Bureau of Indian Standards, after the draft finalized by the Builders Hardware Sectional Committee had been approved by the Civil Engineering Division Council.

This standard was first published in 1951 and subsequently revised in 1961, 1970 and 1976.

This revision of standard makes reference to the latest Indian Standards for various types of materials specified therein. Consequently, it also indicates the designations for various materials in accordance with the latest versions of these standards. It also incorporates the amendment No. 1 which was issued in 1983.

The committee responsible for the preparation of this standard is given at Annex B.

For the purpose of deciding whether a particular requirement of this standard is complied with, the final value, observed or calculated, expressing the result of a test, shall be rounded off in accordance with IS 2 : 1960 'Rules for rounding off numerical values (*revised*)'. The number of significant places retained in the rounded off value should be the same as that of the specified value in this standard.

Indian Standard

HASPS AND STAPLES — SPECIFICATION

(Fourth Revision)

1 SCOPE

This standard covers requirements regarding material, dimensions, manufacture and finish of hasps and staples.

2 REFERENCES

The Indian Standard listed in Annex A are necessary adjuncts to this standard.

3 TYPES

Hasps and staples shall be of the following types:

Type	Description
1	Mild steel, brass or aluminium alloy hasps and staples—safety type (see Fig. 1)
2	Mild steel hasps and staples—wire type (see Fig. 2)

4 MATERIAL

Materials used for the manufacture of hasps and staples shall comply with the requirements given in Table 1.

5 DIMENSIONS

The leading dimensions of the hasps and staples and tolerances thereon shall conform to those specified in Tables 2 to 4, and Fig. 1 and 2.

Table 1 Requirements for Material for Hasps and Staples
(Clause 4)

Sl No.	Material	Suitable Grade in Indian Standard
(1)	(2)	(3)
i)	Extruded aluminium alloy	Designation 63400 WP of IS 733 : 1983 or 63 400 WP of IS 1285 : 1975
ii)	Aluminium alloy sheet	52 000-H1 of IS 737 : 1986
iii)	Cast brass	Grade LCB-2 of IS 292 : 1983
iv)	Mild steel	Grade 0 of IS 1079 : 1988
v)	Mild steel wire	$\frac{1}{4}$ H of IS 280 : 1978
vi)	Phosphor bronze wire	Grade 1 of IS 7608 : 1987
vii)	Aluminium alloys bars, rods and wire	Designation 63400 WP or 64430 WP of IS 733 : 1983 and 64430 WP of IS 739 : 1992

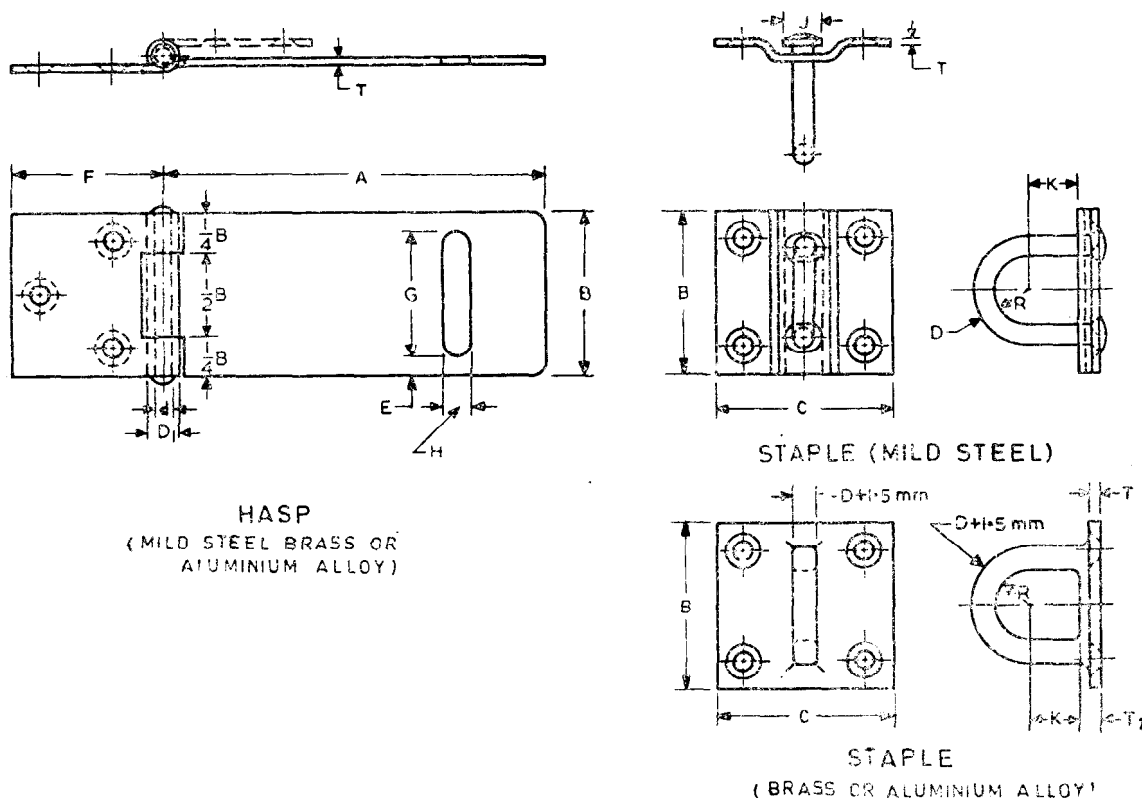


FIG. 1 MILD STEEL OR BRASS OR ALUMINIUM ALLOY HASPS AND STAPLES (SAFETY TYPE)

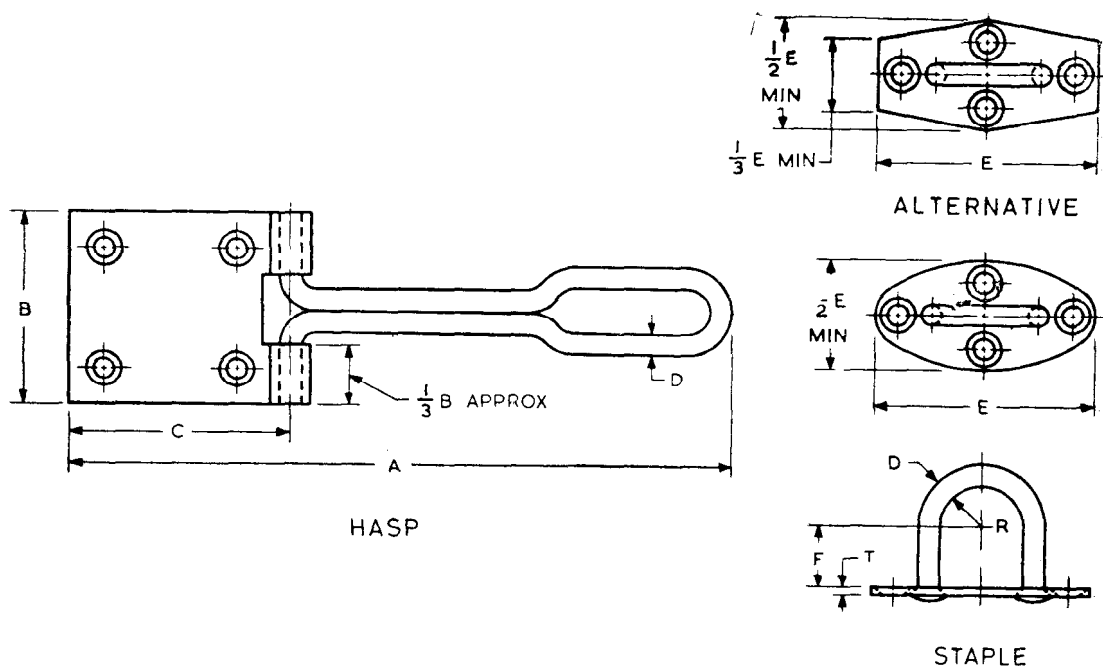


FIG. 2 MILD STEEL HASPS AND STAPLES — WIRE TYPE

6 MANUFACTURE

Hasps and staples shall be well made and free from defects. The hinge pin shall be of mild steel in the case of mild steel hasps and staples, and of mild steel or brass in the case of brass or aluminium alloys hasps and staples. The hinge pin in the case of brass hasps and staples may also be of phosphor bronze, if so required by the purchaser. The movement of the hinge shall be free, easy and square, and shall not have play or shake. The hasps shall fit the staple correctly. The staple, except in the case of cast one, shall be riveted properly to its plate. The ends of the hinge pin for the safety type hasps shall be riveted and properly finished. All screw holes shall be clean and countersunk to suit countersunk wood screw of number specified in Tables 2 to 4. All sharp edges and corners shall be removed.

NOTE — In locations susceptible to atmospheric corrosion, use of brass or phosphor bronze hinge pins is recommended in the case of brass hasps and staples.

7 FINISH

Unless otherwise specified, hasps and staples shall have finish as given below:

- Mild steel hasps and staples Stove enamelled, black and staples
- Brass hasps and staples Oxidized or covered with clear lacquer after polishing as specified by the purchaser
- Aluminium alloy Anodized (see Note)

NOTE — The quality of anodized finish shall not be less than Grade AC 10 of IS 1868 : 1982.

8 MARKING

8.1 Each hasp and staple shall have marked on it the manufacturer's name or trade-mark.

8.1.1 The hasp and staple may also be marked with the Standard Mark.

9 PACKING

Hasps and staples shall be packed in cartons or in other approved packing. Each package shall be labelled with the name or trade-mark of the manufacturer, particulars of the quantity, description of contents, size and type of the hasps and staples.

10 SCALE OF SAMPLING AND CRITERION FOR CONFORMITY

10.1 Lot

In any consignment, all the hasps and staples of the same type and size and manufactured at the same time shall be grouped together to constitute a lot.

10.2 Lot Size and Sample Size

The number of hasps and staples to be selected from a lot shall depend on the size of the lot and shall be in accordance with col 1 and 2 of Table 5.

10.2.1 The number of hasps and staples to be selected in the sample depends upon the size of the lot and shall be in accordance with col 1 and 2 of Table 5. These hasps and staples shall be selected at random and for this purpose, reference may be made to IS 4905 : 1968.

Table 2 Dimensions of Mild Steel Hasps and Staples — Type 1

(*Clauses 5 and 6, and Fig. 1*)

Size	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	<i>F</i>	<i>G</i>	<i>H</i>	<i>J</i>	<i>K</i>	<i>R</i>	Thickness of Sheet, <i>T</i>	Dia of Hinge Pin, <i>d</i>	Screw Holes		
														No. on Hasp	No. on Staple	For Wood Screw No.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm			
90	90±2	38.0±1.5	46±2	5.00±0.10	5.0±0.5	35.0±1.5	28.0±0.5	8.0±0.5	12±1	8±1	8.0±0.5	2.00±0.10	4.00±0.05	3	4	8
115	115±2	38.0±1.5	46±2	5.00±0.10	5.0±0.5	55.0±1.5	28.0±0.5	8.0±0.5	12±1	8±1	8.0±0.5	2.00±0.10	4.00±0.05	3	4	8
150	150±2	45.0±1.5	60±2	6.30±0.10	6.0±0.5	65.0±1.5	33.0±0.5	10.0±0.5	15±1	14±1	9.0±0.5	2.24±0.10	5.00±0.06	4	4	10
175	175±2	45.0±1.5	60±2	6.30±0.10	6.0±0.5	65.0±1.5	33.0±0.5	10.0±0.5	15±1	14±1	9.0±0.5	2.24±0.10	5.00±0.06	4	4	10

3

Table 3 Dimensions of Brass or Aluminium Alloy Hasps and Staples — Type 1

(*Clauses 5 and 6, and Fig. 1*)

Size	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	<i>F</i>	<i>G</i>	<i>H</i>	<i>K</i>	<i>R</i>	Thickness		Dia of Hinge Pin, <i>d</i>	Dia of Butt, <i>D₁</i> on Hasp	Screw Holes		
											<i>T</i>	<i>T₁</i>			No. on Hasp	No. on Staple	For Wood Screw No.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)
mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm			
90	90±2	40.0±1.5	42.0±1.5	5.00±0.25	6.0±0.5	35±1	28.0±0.5	10.0±0.5	8±1	6.5±0.5	2.00±0.25	3.00±0.25	3.15±0.10	6.0±0.2	3	4	5
115	115±2	40.0±1.5	42.0±1.5	5.00±0.25	6.0±0.5	45±1	28.0±0.5	10.0±0.5	11±1	6.5±0.5	2.00±0.25	3.00±0.25	3.15±0.10	6.0±0.2	3	4	5
150	150±2	46.0±1.5	48.0±1.5	6.00±0.25	7.0±0.5	65±1	32.0±0.5	11.0±0.5	14±1	7.5±0.5	3.00±0.25	4.00±0.25	4.00±0.10	8.0±0.2	4	4	8
175	175±2	46.0±1.5	48.0±1.5	6.00±0.25	7.0±0.5	65±1	32.0±0.5	11.0±0.5	14±1	7.5±0.5	3.00±0.25	4.00±0.25	4.00±0.10	8.0±0.2	4	4	8

Table 4 Dimensions of Mild Steel Hasps and Staples — Type 2
(*Clauses 5 and 6, and Fig. 2*)

Size	A	B	C	D	E	F	R	Thickness of Sheet, T	Screw Holes		
									No. on Hasp	No. on Staple	For Wood Screw No.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
mm	mm	mm	mm	mm	mm	mm	mm	mm			
65	65±2	25.0±1.5	22.0±1.5	3.15±0.05	38.0±1.5	8.0±0.5	5.0±0.5	1.25±0.10	2	2	6
75	75±2	25.0±1.5	25.0±1.5	3.15±0.05	38.0±1.5	8.0±0.5	5.0±0.5	1.25±0.10	2	2	6
90	90±2	25.0±1.5	28.0±1.5	3.15±0.05	38.0±1.5	8.0±0.5	5.0±0.5	1.25±0.10	2	2	6
100	100±2	32.0±1.5	38.0±1.5	4.00±0.05	42.0±1.5	11.0±0.5	6.0±0.5	1.60±0.10	3	2	6
125	125±2	38.0±1.5	48.0±1.5	5.00±0.06	55.0±1.5	14.0±0.5	7.0±0.5	1.60±0.10	4	4	6
150	150±2	45.0±1.5	55.0±1.5	6.30±0.06	55.0±1.5	14.0±0.5	7.0±0.5	2.00±0.10	4	4	10
175	175±2	50.0±1.5	55.0±1.5	6.30±0.06	55.0±1.5	14.0±0.5	8.0±0.5	2.00±0.10	4	4	10

*Where so required by the purchaser, diameter may be 5.00±0.05 instead of 4.00±0.05.

10.3 Tests

All the hasps and staples selected as in 10.2 shall be checked for dimensional requirements (*see 5*) manufacturing defects (*see 6*) and finish (*see 7*). Any hasp and staple which fails to satisfy the requirements of any one or more of the characteristics, shall be considered as defective hasp and staple.

10.4 Criterion for Conformity

A lot shall be considered as conforming to the requirements of this standard if the number of defectives found in sample does not exceed the corresponding acceptance number given in col 3 of Table 5, otherwise it shall be considered as

not conforming to the requirements of this standard.

**Table 5 Scale of Sampling and Criterion
for Acceptance**
(*Clauses 10.2 and 10.4*)

Lot Size	Sample Size	Permissible Number of Defective Hasps and Staples
(1)	(2)	(3)
Up to 100	13	0
101 to 300	20	1
301 to 500	32	2
501 to 1 000	50	3
1 001 and above	80	5

ANNEX A

(*Clause 2*)

LIST OF REFERRED INDIAN STANDARDS

IS No.	Title	IS No.	Title
280 : 1978	Mild steel wire for general engineering purpose (<i>third revision</i>)		general engineering purposes (<i>third revision</i>)
292 : 1983	Leaded brass ingots and castings (<i>second revision</i>)	1079 : 1988	Hot-rolled carbon steel sheet and strip (<i>fourth revision</i>)
733 : 1983	Wrought aluminium and aluminium alloy bars, rods and sections for general engineering purposes (<i>third revision</i>)	1285 : 1975	Wrought aluminium and aluminium alloy extruded round tube and hollow sections (for general engineering purposes) (<i>second revision</i>)
737 : 1986	Wrought aluminium and aluminium alloy sheet and strip for general engineering purposes (<i>third revision</i>)	1868 : 1982	Anodic coatings on aluminium and its alloys (<i>second revision</i>)
		4905 : 1968	Methods for random sampling
739 : 1992	Wrought aluminium and aluminium alloy wire for	7608 : 1987	Phosphor bronze wire for general engineering purposes (<i>first revision</i>)

ANNEX B

(Foreword)

Builders Hardware Sectional Committee, CED 15

Chairman

SHRI P. KRISHNAN

Members

SHRI V. K. AGARWAL
 SHRI A. K. AGARWAL (*Alternate*)
 SHRI A. BANDOPADHYAY
 SHRI GURUSWAMY (*Alternate*)
 SHRI R. K. BHANDARI
 SHRI R. L. SHARMA (*Alternate*)
 SHRI SUDHIR BATRA
 CONTROLLER OF STORES
 SHRI S. M. GARG
 SHRI B. M. GARG (*Alternate*)
 SHRI A. GHOSH
 SHRI A. K. SARKAR (*Alternate*)
 SHRI N. C. JAIN
 LT COL B. PARGHI (*Alternate*)
 SHRI L. A. JAISINGHANI
 SHRI L. K. SINGH (*Alternate*)
 SHRI S. C. KAPOOR
 SHRI I. C. KHANNA (*Alternate*)
 SHRI RAM F. KEWALRAMANI
 SHRI SURESH CHAND
 COL P. C. KHANNA
 SHRI ANIL CHAND (*Alternate*)
 SHRI P. ANIL KUMAR
 SHRI P. A. KOHLI (*Alternate*)
 SHRI V. K. MEHTA
 SHRI SURAJ PRAKASH (*Alternate*)
 SHRI J. RAGHURAM
 SHRI O. P. RATRA
 SHRI M. M. MISTRY
 SUPTD. ENGINEER
 EXECUTIVE ENGINEER (*Alternate*)
 SHRI SAHIB SINGH VIRDI
 SHRI S. MOWJEE (*Alternate*)
 SHRI Y. R. TANEJA, DIRECTOR (CIVIL ENGG)

Representing

Central Public Works Department, New Delhi

Hindalco Industries Ltd, Bombay

Northern Region, Ministry of Industry, New Delhi

Delhi Development Authority, New Delhi

Mech (India) Industries, Delhi
 Railway Board (Ministry of Railways)
 D. P. Garg & Co, NOIDA

National Test House, Calcutta

Ministry of Defence, New Delhi

Fixopan Engineers Pvt Ltd, New Delhi

Directorate General of Supplies & Disposals, New Delhi

Indian Institute of Architects, Bombay
 Central Building Research Institute (CSIR), Roorkee
 Argent Industries, New Delhi

Indian Aluminium Co Ltd, Calcutta

Engineer-in-Chief's Branch, Army Headquarters, New Delhi

J. H. Aluminium Pvt Ltd, Madras
 Building Material & Technology Promotion Council, New Delhi
 National Building Organization, New Delhi
 Tamil Nadu Housing Board, Madras

M. C. Mowjee & Co Pvt Ltd, Calcutta

Director General BIS (*Ex-officio Member*)

Member Secretary

HEMANT KUMAR
 Joint Director (Civ Engg) BIS

Standard Mark

The use of the Standard Mark is governed by the provisions of the *Bureau of Indian Standards Act, 1986* and the Rules and Regulations made thereunder. The Standard Mark on products covered by an Indian Standard conveys the assurance that they have been produced to comply with the requirements of that standard under a well defined system of inspection, testing and quality control which is devised and supervised by BIS and operated by the producer. Standard marked products are also continuously checked by BIS for conformity to that standard as a further safeguard. Details of conditions under which a licence for the use of the Standard Mark may be granted to manufacturers or producers may be obtained from the Bureau of Indian Standards.

Bureau of Indian Standards

BIS is a statutory institution established under the *Bureau of Indian Standards Act, 1986* to promote harmonious development of the activities of standardization, marking and quality certification of goods and attending to connected matters in the country.

Copyright

BIS has the copyright of all its publications. No part of these publications may be reproduced in any form without the prior permission in writing of BIS. This does not preclude the free use, in the course of implementing the standard, of necessary details, such as symbols and sizes, types or grade designations. Enquiries relating to copyright be addressed to the Director (Publications), BIS.

Review of Indian Standards

Amendments are issued to standards as the need arises on the basis of comments. Standards are also reviewed periodically; a standard along with amendments is reaffirmed when such review indicates that no changes are needed; if the review indicates that changes are needed, it is taken up for revision. Users of Indian Standards should ascertain that they are in possession of the latest amendments or edition by referring to the latest issue of 'BIS Handbook' and 'Standards Monthly Additions'. Comments on this Indian Standard may be sent to BIS giving the following reference :

Doc : No. CED 15 (5260)

Amendments Issued Since Publication

Amend No.	Date of Issue	Text Affected

BUREAU OF INDIAN STANDARDS

Headquarters:

Manak Bhavan, 9 Bahadur Shah Zafar Marg, New Delhi 110002

Telephones : 331 01 31, 331 13 75

Telegrams : Manaksanstha
(Common to all Offices)

Regional Offices:

Telephone

Central : Manak Bhavan, 9 Bahadur Shah Zafar Marg
NEW DELHI 110002

{ 331 01 31
{ 331 13 75

Eastern : 1/14 C. I. T. Scheme VII M, V. I. P. Road, Maniktola
CALCUTTA 700054

{ 37 84 99, 37 85 61
{ 37 86 26, 37 86 62

Northern : SCO 445-446, Sector 35-C, CHANDIGARH 160036

{ 53 38 43, 53 16 40
{ 53 23 84

Southern : C. I. T. Campus, IV Cross Road, MADRAS 600113

{ 235 02 16, 235 04 42
{ 235 15 19, 235 23 15

Western : Manakalaya, E9 MIDC, Marol, Andheri (East)
BOMBAY 400093

{ 632 92 95, 632 78 58
{ 632 78 91, 632 78 92

Branches : AHMADABAD. BANGALORE. BHOPAL. BHUBANESHWAR. COIMBATORE.
FARIDABAD. GHAZIABAD. GUWAHATI. HYDERABAD. JAIPUR. KANPUR.
LUCKNOW. PATNA. THIRUVANANTHAPURAM.